

Privileged and Confidential

By facsimile

January 24, 1994

Memorandum to Mr. Winokur

Re: Research Ideas

Matt,

The following are ideas for possible research projects for 1994. You will see that I have sometimes construed "research" broadly to include reviews and summaries, which may trouble CIAR. You will also see that the ideas differ in scope and importance, but that most would permit a greater use of Europeans in Asia and hence greater inter-regional cooperation.

Finally, you should be aware that, in addition to CIAR, various supplemental funding sources might be possible. Depending on the project, the nationalities of the researchers, and other variables, we might be able to obtain partial funding from the EC/EU, British Council, or other sources. Among the possible disadvantages of this, however, might be delays and broad reporting requirements. We might more quickly enter into cooperative arrangements with various institutions which would give us endorsements and greater credibility, although not financing.

If any of the following ideas are of interest, we should discuss them individually.

1. The impact of outdoor pollution on IAQ. It would be useful to have additional data regarding outdoor pollution, especially from vehicle exhausts, and its adverse effects on indoor environments. Apart from some data developed by Roger Perry, there is surprisingly little of value. Good data would certainly confirm that outdoor sources create vastly larger IAQ problems than ETS, particularly in warmer climates and developing countries. We all know instinctively that that is true, but we still lack concrete and dramatic evidence. Some monitoring has been done in Asia -- some of it evidently under CIAR auspices and perhaps some of it with EC help -- but I have been told that much of the work is amateurish. Whether or not that is actually fair, we need more evidence than we now have.

We could use Europeans (perhaps for the sake of appearances with some Asian collaboration) to do first-rate work. It could take various forms -- national, regional (restricted for example to southern Europe, central Europe or Asia), or linking two or more regions. I would ideally like a multi-regional project -- one that uses the same equipment and people to do parallel studies in selected world-wide cities. In essence, the program would simply measure various components both at various busy intersections and in nearby offices and public buildings. It might, for example, include Madrid, Milan, Cairo, Ankara,

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Hong Kong, and Seoul. If you are interested in China, Guangzhou or Shanghai would certainly be suitable. London might be added as a benchmark. All have terrible outdoor pollution problems, and those problems are surely the single greatest sources of poor indoor air. It would be useful to prove it.

2. An IAQ database. With Mopsy's encouragement, we have already urged several people to collect and summarize existing IAQ data from the U.S. and Europe, and to use those data to demonstrate and explain the real IAQ problems. The basic idea has been to make better use of existing studies, and to use them to show that the important IAQ problems have little or nothing to do with ETS. The project could usefully be expanded in two ways. First, we could include Asian and other world-wide data. There isn't as much data there, but why not include it? A combination of Europeans and Asians could readily do it, with most of the work done by those who have already collected the European data. Second, we could link those data with the result of the monitoring projects suggested above. In other words, we could supplement the existing data and then use both sources to compile an overall data base from which helpful conclusions and recommendations could be drawn. The consultants could rightly say that they have the best and most comprehensive source of world-wide IAQ data.

3. A code of ideal IAQ standards. We have long lamented the absence of "ideal" IAQ standards which could be used to oppose restrictive proposals. For want of anything else, we are always compelled to fall back on ASHRAE as our idea of "good" standards. That is helpful, but ASHRAE is really too American for full persuasiveness in many parts of the world. To supplement it, CIAR might sponsor a committee of well-qualified people from several countries to devise and publish a code of basic, simple standards suitable for use in most environments. Their "research" would consist of reviewing existing standards and research findings. I suspect (and hope) that the final results would closely resemble some of the HBI suggestions, but it would be well to have them endorsed and publicized by other independent experts. The proposed code could be published, and indeed printed in a brochure which could be widely distributed. We would then have a sensible collection of third-party ideas and findings to which we could refer regulators and drafting committees. If we do it properly, we might obtain institutional endorsements to give the proposals additional credibility. For the first time, we would have something positive to say, rather than simply remaining eternally on the defensive.

This is a project about which CIAR might turn up its nose, on grounds that it is not "real" research. If so, I think we could use some of our 1994 publications money, plus a contribution from Asia to cover their participation, to pay for it.

4. VOC studies. We have encouraged a series of conferences and papers regarding VOCs (volatile organic compounds), which have become a very fashionable issue in IAQ circles. Last autumn's London meeting dealt with them, and so will this year's Beijing meeting. VOCs are released from paint, fabrics, wall coverings, and numerous other sources, and some are found in ETS. Many "sick building" issues are thought to be problems caused by VOCs. The sources of VOCs are widely understood, but there is little

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data about either the relative significance of those sources or of their consequences for human health. As a result, we cannot persuasively show that ETS is not a major cause of VOC-related issues, which leaves us vulnerable to claims that they are another reason for regulating smoking.

One answer would be studies of the contributions made by selected non-ETS sources of VOCs. We could focus on the problems caused by non-ETS sources and emphasize their relative significance. In fact, I believe that those sources dwarf ETS in importance, and that our position would be strengthened if ETS could be placed into some reasonable perspective. One way to start would be studies focused upon a few VOCs which (a) are likely to cause irritation or discomfort and (b) are not found to any significant degree in ETS. In other words, we would direct attention to other people's problems. The manufacturers of paints and other non-ETS sources would not of course be pleased, but they have not given us substantial support, at least in Europe.

5. ETS monitoring studies. With the diminished role now played by HBI, we are no longer conducting (at least in Europe) any significant number of monitoring studies of ETS levels in restaurants, offices, bars, and other work or public places. You will remember that HBI conducted a series of studies in various locations in Scandinavia, Switzerland, and elsewhere. While at BAT, Chris Proctor conducted some similar studies. Those studies produced concrete data which have been quite useful in discounting the need for regulation. They permitted us to argue that in fact ETS levels (in other words, the levels of nicotine, etc.) were actually fairly low and that regulation was unnecessary. It would be helpful if such studies were continued.

If (as I assume) HBI is no longer a viable option, we could surely find alternatives. Again, the projects could vary in scope. They might be limited to a particular country or region, or they might involve comparative studies in several countries in different regions. In my view, a multinational program linking Europe and Asia would again have the largest value and payoff, but it would also be the most costly and complicated to conduct. Given Chris's previous interest in such studies, this might be one in which BAT could be induced to cooperate.

6. Combustion sources. From a scientific perspective, ETS is only one form of pollution caused by combustion. In many parts of the world, other combustion sources (fireplaces, heating and cooking stoves, charcoal and kerosene heaters, etc.) produce far more particulates and other pollutants than cigarette smoking. This is especially true in developing countries. We have already encouraged some work to show the impact of other combustion sources, but it would be helpful to draw together all of the existing data, perhaps supplement it by research where necessary, and use it to show the relative insignificance of ETS. A multinational program would again be ideal, drawing together evidence from such places as southern Spain, Turkey, Egypt, Korea, China, and Thailand. What is needed is a comprehensive review paper, in which lessons and trends could be identified, which could be prepared by a small group of Europeans and Asians.

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7. The frailties of questionnaire data. Virtually all of the anti-ETS studies, including the forthcoming IARC study, rely on questionnaire data. Long after the fact, participants are asked to recall "facts" about their feelings, exposures and symptoms, and those "facts" are used to measure risks. I am convinced that such memories are inevitably distorted and misleading, and yet most governments continue to use them to shape public policies. Surely we could encourage a study to illustrate their weaknesses and distortions. For example, a study might follow two similar groups, one of which records facts as they occur while the other is only asked about them (say) six months later. I suspect that there would be marked differences. The facts could, but need not, involve exposure to ETS. They could as easily be something as routine as what people ate for lunch or dinner. Relatively small groups could be used, to keep costs low. For little effort, we could have additional evidence of the unreliability of questionnaire data.

8. Epidemiological Studies. In preparation for the IARC study, we should continue to monitor the medical press and collect all newly published major epidemiological studies. Such studies, and any correspondence and press coverage which they generate, should be reviewed in order to assess the statistical methods used, and the conclusions drawn from such statistics. Review articles and critiques should be encouraged as appropriate.

9. Confounders. Further study of confounders, particularly dietary factors, is likely to be rewarding and may prove helpful in forming a response to the IARC study when it is finally published. This is an area in which some of our consultants are particularly interested, and we should explore specific issues which merit additional research.

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All of these ideas of course need further thought and refinement, but I hope that they will give you what you immediately need. We would be delighted to develop them further if they sound interesting.

Charles Lister

cc: Mrs. Green

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